ABSTRACT OF THE DISCLOSURE

Two or more access control lists that are syntactically or structurally different may be compared for functional or semantic equivalence in order to configure a security policy on a network. A first access control list is programmatically determined to be functionally equivalent to a second access control list for purpose of configuring or validating security policies on a network. In one embodiment, a box data representation facilitates comparing entries and sub-entries of the lists.